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HOUSING AND NEW COMMUNITIES

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INTRODUCTION

The concept of new communities is certainly not a new one in the United States, but only recently has it been advocated nationally as a possible alternative to social, physical, and economic problems arising from urban growth, suburban sprawl, and the decline of our central cities. Typical of this response is Harvey Perloff when he writes:^{1/}

The critical missing link in our present institutional capacity to solve the thornier urban problems might be filled by the ability to create totally new communities in both open and intown areas --specifically designed to achieve significant political and social ends.

In this essay I would like to suggest that the concept of new communities --although ill-defined and poorly pursued in the past-- does offer an unparalleled opportunity for a productive national policy commitment. However, with the tremendous competition for somewhat limited financial resources, I feel that such a new communities policy will be undermined by urban renewal, model cities and "ghetto gilding" programs unless there is a clear system of program evaluation established at the outset. Such a program must analyze what it is that new communities are trying to provide (goals and objectives) and how well they are doing in achieving these ends (social indicators). In this paper I will limit myself to the particular challenge of housing in new communities.

GOALS FOR A NEW COMMUNITY

Most efforts to define the goals for a new community are actually general statements of what I would call program objectives: they are quite concrete, measurable policy statements, often verging on the level of specific programs to eliminate an anticipated problem. Robert Gladstone, economic consultant for Rouse's planning staff at Columbia, lists a series of "development values" for new communities:^{2/}

- 1) Shorter work to home trips
- 2) Ease of internal movement
- 3) Elimination of sprawl by planning open space
- 4) Accessibility to open space and recreation
- 5) Improved visual environment
- 6) Economics in land development and utilization
- 7) Variety of housing
- 8) More rational zoning patterns
- 9) Creation of rational service areas for local government
- 10) Greater fiscal viability due to balanced development.

A similar listing developed by William Finley, Vice President of the Rouse Company, includes most of Gladstone's physically-oriented values plus some more social objectives:^{3/}

- to create new institutions that will better meet human needs than the older established ones
- to establish communities that provide a high degree of human communication
- to provide the technical and legal framework which assures continued maintenance of community
- to allow a person to live and work in the same community with sufficient residential and job mobility to allow vocational growth
- to provide a wide range of community facilities
- to achieve a democratic social balance.

My own effort to determine goals for a new community have led to five fundamental categories of goals with a series of objectives arising from them. These might be outlined as follows:

Goal 1: Create a social order free from inflexible social stratification and discrimination in which individuals can be free to shape their own environment.

- 1) Establish a sense of community and local identity through the creation of public open spaces, common recreational facilities, and identifiable elements of a city at a reasonable human scale.
- 2) Establish racial and economic integration from the outset.
- 3) Avoid the creation of a vested interest in a fixed social order and resistance to change.

Goal 2: Create a community dedicated to universal physical and mental health and to a continuation of education throughout the life process.

- 1) Create new concepts of community health based on preventive medicine.
- 2) Extend the range of education to pre-school and the adult years.
- 3) Change the physical orientation we have toward schools
 - a) School as a neighborhood center
 - b) University as urban research center
 - c) Educational facilities for civic purposes

Goal 3: Create a high level of amenities and services emphasizing choice and variety.

- 1) Maximum choice:
 - a) Residence: type, density, cost, neighborhood
 - b) Employment for anyone wishing to work
 - c) Recreation for all ages
- 2) Maximum variety:
 - a) Scale, types of spaces
 - b) Visual environment
 - c) Social structures and life styles

Goal 4: Create an urban system with a firm fiscal base as both a semi-autonomous area and an integral part of a larger regional economic area.

- 1) Land for the new community should be assembled as a community asset.
 - a) Resident control should be established at the outset.
 - b) Land should be leased and sold to private developers under the strict guidance of a body of residents.
 - c) Profits from land sales should be reinvested in the community to create better services and amenities.
- 2) Experimentation should be undertaken with radical reforms in methods of taxation and financing.

Goal 5: Create a prototypical testing ground for new solutions to urban problems.

- 1) Apply new technologies to housing production
 - a) Improve low cost housing techniques
 - b) Raise the standards of performance
- 2) Experiment with total energy systems
- 3) Develop new and efficient relationships between traditionally

separated aspects of a city.

- 4) Seek to build in a mechanism for regeneration and rebuilding urban areas as they age.

In the critical area of housing these basic goals suggest a new community program aimed toward providing a maximum of residential choice and a variety of social arrangements and life styles. How do these compare to our present national policy?

NATIONAL HOUSING POLICY

The New Communities Title IV legislation begins with a statement of what Congress has apparently conceived as the goals for new communities (Section 402.) The goals stress:

- 1) Betterment of living conditions through the comprehensive development of homes, commercial and industrial facilities, public and community facilities and open spaces
- 2) Contributions to the economic growth of the surrounding area
- 3) Increased housing supply
- 4) Innovation in housing and community development technology and in land use planning
- 5) Enlargement of housing choice and new investment opportunities
- 6) Stressing local homebuilders
- 7) Maximum uses of new housing technology

Aside from the initial flight into Utopianism, these goals tend to reiterate the 1968 Housing Act's obsession with producing vast quantities of new housing. In an apparent effort to make up for lost time, Congress committed itself to a policy of producing 26 million units in a brief ten year period. Admirable as any non-military enthusiasm may be and regardless of the political motivation for such a bold commitment, this Great Leap Forward is bound to create more problems than it can solve.

We have already seen an indication of the confusion, mismanagement and inefficiency that can occur from HUD's over-enthusiasm in Roxbury's current Boston Rehab. Program. I fear that similar inefficiencies will occur on a national scale if the current goal is taken seriously and if we keep asking what amount instead of what kind of housing we are going to produce.

As Tony Downs has written:

The nation cannot simply measure the housing needs that have accumulated throughout its history and decide to satisfy all those needs within a single decade, regardless of what happens in any other aspect of national life.^{4/}

Downs goes on to argue for a more realistic time schedule in housing production in order to avoid public disillusionment when production is ultimately delayed. I would argue instead, that the 26 million goal is unacceptable because it places the stress on the quantity, not quality of the units to be produced. Without considering the full implications of such a program, Congress is falling into the same trap it created with its "maximim feasible" superlative only a few years ago.

Looking at the new community legislation as an indication of national goals ^{reveals} how this emphasis on efficiency has superceded the issue of equity or the quality of the housing environment. The stress is on new technologies, innovative housing construction and the expansion of the supply of housing. Little is said about the quality of life that will be created.

It is with this concern as a backdrop that I have set out to propose a housing program for a new community --a new-town-in-town currently being planned for the Boston Harbor Islands by Urban Systems Lab at M.I.T.

A METHODOLOGY FOR NEW COMMUNITY PLANNING

Harbor Islands Planning

Initial planning for the Harbor Islands new community began with long-winded discussions about social goals. Because these are so integrally related to the early housing policies, we must begin with a brief outline of alternative approaches to goals and the (often contradictory) implications each would have on the final population distribution and housing characteristics of the Island community.

- A. The new community should be directed to meet the objective needs of the Boston core
 1. Housing should predominantly meet the critical shortage areas in Boston's existing stock
 2. Housing should be used for relocation of families being displaced by urban renewal, highways, etc.
 3. Housing should be constructed in an effort to strengthen the central city tax base
 4. Housing should be used to draw the middle class back into Boston from the outer suburbs
 5. Housing construction should be as limited as possible to maintain the Islands as a recreational resource
- B. The new community should focus on meeting the needs of the 50,000 projected residents
 1. Housing should be constructed for a population with incomes paralleling that
 - a. existing in the Boston core
 - b. existing in the Boston SMSA
 - c. projected for the core in 1990
 - d. projected for the region in 1990
 2. Housing should be slowly staged and privately constructed by many developers for a wide variety of style, sizes, etc. (The final population distribution should not be anticipated.)

C. The new community should be developed as an innovative, prototypical experiment in new urban forms, life styles and social relationships

1. Housing should be planned in ideal sociological groupings in an effort to create a vital and viable community
2. Housing should emphasize new technologies and mass production: the same type of unit might be available to all income groups
3. Housing should encourage radically new forms of social heterogeneity and interaction (racial, ethnic, and class.)
4. Housing should seek to offer solutions to specific problems that might be directly applicable to the Boston core's social and housing needs

In terms of income distribution (which must be clearly defined before one can develop a housing program) the possibilities ranged from primarily public housing to luxury apartments. Some of the possible ranges are shown below:

	Family Income Range (1965, \$thousand)				
	0-4	4-7	7-10	10-14	14+
A. South Boston	20%	43%	25%	10%	2%
B. Roxbury	37%	37%	19%	6%	1%
C. Relocation plan	38%	37%	12%	10%	5%
D. Boston core	15%	27%	34%	20%	14%
E. - Boston SMSA	11%	23%	26%	23%	17%

The problem of reconciling sharply conflicting goals in proposing a program for housing and other aspects for the new community development led to the creation of what might be called a methodology for planning. Basically it began with a clear statement of the critical assumptions (A.) that must be made or assumed before a detailed proposal can be adopted. The next step is the creation of a procedural format for research to insure that all aspects of a topic like housing are considered before a program is proposed: this is called the topic-aspect report (B.) Finally the methodology suggests a guide to insure that a well-balanced trade-off among the numerous goals is being made in proposing the final program.

A. ASSUMPTIONS

Ten assumptions have been made under the first part of this methodology:

1. Initial development plans will include housing on Long, Spectacle, Thompson and on some further land fill on Columbia Point.
2. Foundation conditions on each Island will allow the construction of high rise towers of approximately 25 stories.
3. Zoning and building code modifications will pose no major problems to development.
4. Federal housing programs currently available will be adequately funded during the next 10 to 15 years.
5. Housing will be provided for approximately 50,000 people and a home will be guaranteed to anyone working in the new community.
6. No family shall be required to pay more than 25% of its income for a dwelling.
7. A significant portion of the housing shall be available to low and moderate income families.
8. Housing will be developed by both public and private developers according to the master plan.
9. Land for residential uses shall be sold to developers at a differential scale according to the density and income level specified in the plans. Land for public housing will be provided at no cost to the Housing Authority.
10. The residential development of Moon will be accounted for in the plans but will not fall under the jurisdiction of the Development Corporation.

B. TOPIC - ASPECT REPORT

The second part of the methodology (Topic - Aspect Report B.) is research on relevant background information and data that will be critical in making decisions at a later date. In order to insure comprehensiveness, the topic of housing is analyzed as it relates to the four basic aspects of development: physical construction, social structure, economics and financing, and governmental policy and programs. Research for the various aspects of the topic of housing might then be organized as follows:

Physical: design criteria, land use considerations, construction problems, new technologies, clustering and physical groupings, density

Social: sociological considerations in design and neighborhood organization, problems of social mix, specific housing needs, neighboring patterns, marketability of various housing schemes

Economic: land values, tax rates, financing possibilities, subsidy programs, building costs

Government: all possible federal programs that might be used, development controls, zoning and building codes, special legal arrangements, anticipated political difficulties

An initial report using this methodology is included in Appendix A.

C. RECONCILING GOALS

The third step is to derive a set of goals (C.) that will guide basic policies for housing in new communities. As we saw earlier, initial discussions of goals for the entire new community was directed toward using the Islands:

- a. to meet the objective needs of Boston
- b. to meet the needs of the future residents
- c. to create a prototypical community

These three arguments, while not mutually exclusive, are ones that might be advocated respectively by

- a. politicians of the B.R.A.
- b. real estate developers
- c. urban designers and M.I.T. academicians

The problem at this stage of planning is to identify the implications that might result from following each goal, to weigh them, and to determine the best course of action.

In general terms, to adopt the politician's goals would lead to programs based on:

- acceptability of the housing solutions to the majority of Bostonians now voting
- the placement of "problem" groups on the Islands
- low cost to the taxpayer

- efforts to maximize the tax revenue to the city
- the campaign whims of a few politicians

Pursuing the goals of the real estate developer might lead to programs based on:

- maximum city subsidy on costs of land and utilities
- no resident participation until the development is completed
- compromises in providing amenities for residents in preserving open space, and in planning for future flexibility
- rapid rates of return in the short run
- minimally acceptable housing standards

Finally, if we were to be guided by the academicians in molding an innovative urban workshop we might base our programs on:

- maximum use of new technologies, regardless of economic cost
- experimentation with social programs and intergroup behavior
- developing methods of feedback and data collection
- creation of small, experimental sub-communities
- maximum participation by Boston residents
- institutions based on neighborhood control

The final step in our methodology is the synthesis of the most desirable goals into a package of goals that will readily translate into specific programs for new community development. This is done by weighing the trade-offs and implications of each set of goals.

In identifying the implications of political goals it is apparent that there are great dangers in setting out to meet Boston's needs. First, meeting some of the objective needs at one point in time is merely avoiding the more deep-seated causes of long-range problems.

Second, the needs are often contradictory: meeting the B.R.A.'s needs for low cost housing will not help the city's fiscal burdens.

Third, the Island resource is not large enough to solve all of any single problem so any effort to sell such a scheme to the public would be self-defeating.

Fourth, each political interest group defines Boston's needs with a different emphasis. Which should guide the final plan?

The implications of the real estate goals tend to emphasize efficiency in housing production rather than an equitable (although perhaps more expensive) solution. The primary advantages of the real estate approach is its greater emphasis on the private market's ability to construct large amounts of housing quickly. Allowing the market mechanisms to operate as they have in the past will, however, lead to ill-planned subdivisions with facilities and amenities which are not adequate for a viable and dynamic community.

At the risk of accepting the academicians' goals outright I would like to adopt several points from above in addition to several I will add which are of a prototypical nature.

GOALS: (political)

1. A significant amount of the housing on the Islands should be provided for low and moderate income families.
2. Whatever housing scheme is adopted, it should not place any financial burden on the City of Boston during the developmental period.

GOALS: (real estate)

3. Land sold to private developers for housing to be constructed for special groups (lower income, elderly) should be subsidized to an attractive rate.
4. Basic utilities should be provided by the City or the developing corporation and the private developers should be spared most of the basic site preparation costs.
5. A very wide range of housing types (styles, costs, sizes, locations) should be made available to the Islands.

GOALS: (academic)

6. The theme for the entire housing program must be FLEXIBILITY. It must be possible for units to be constructed, moved, enlarged, improved, grouped, and discarded with a minimum of difficulty.
7. While flexibility implies component or industrialized housing techniques, there must also be a wide variety of styles for all tastes. Due to the scale of production, a pre-fab solution should be planned for a large number of units. (Special funds are available for low cost innovative housing techniques from the Secretary of HUD.)
8. Staging will depend very heavily on the market demand and the interest of different developers. In general, it will probably be beneficial to begin with middle income units of lower density and slowly add other income ranges at lower density. The high

rise will take longer to construct and should come later. The last units to be staged should be the public housing.

9. A house or apartment should be available to everyone who will be working in the new community.
10. There should be a careful effort to eliminate the distinction between public and private housing. Several techniques should be used, including rent supplements (if available), small projects, Lavanburg-type turnkey I and II developments, 235 ownership of townhouses, rent skewing.
11. Residential areas should be mixed with recreational, educational, health and some commercial uses.
12. Homeownership, coops and condominiums should be encouraged by arranging federal subsidies and by giving small subsidies on land cost to specific developers.
13. Where mortgages are not available at reasonable rates, the developing corporation should act as a secondary mortgage lender.
14. Residential heterogeneity should exist on each Island although relative homogeneity will probably exist on a smaller neighborhood scale of 300 - 500 families. Economic and racial heterogeneity should be encouraged in all aspects of new community development.
15. The development corporation should set up limited dividend subsidiaries to sponsor federally-subsidized housing when comparable organizations cannot be found to take the initiative.

distinction between "political"
real estate / economic worth less,

APPENDIX A

BOSTON HARBOR ISLANDS NEW COMMUNITY

HOUSING

TOPIC-ASPECTS REPORT

Matt Hobbs

HOUSING: PHYSICAL

Background and recommendations:

1. Industrialized housing looks like it will have great potential in the kind of density we are talking about. Three points are important:

- a. Large-scale application is limited not by technology, design or cost, but by the institutional constraints.
- b. Possible development of compact, efficient on-site prefabrication plants may significantly affect the relative efficiency of industrialized buildings.
- c. Industrialized housing is changing the skill-mix of the building labor force by eliminating many of the traditional on-site craft skills and increasing the demand for engineers, technicians, and multi-skilled workers and machine operators.

see Industrialized Building: A Comparative Analysis ... by Patman, Howenstine, et. al. 1968

see also numerous articles about Habitat at EXPO, e.g., J. of Housing, Sept. 1966

2. There is a growing literature on the success of apartment communities of the semi-luxury variety (Charles River Park being the most notable local example). Four points are made:

- a. Groupings of 300-400 units is usually a good number to create a community spirit
- b. Amenities like landscaping and attractive architecture are critical
- c. The first arrivals are usually young marrieds, highly mobile, with little money and looking for small apartments. Later come the long-term residents with more money and desire for more space.
- d. These apartment communities have had great success in attracting people from existing apartments, and have just begun to attract single-family residents.

see Apartment Communities, 1968 by Urban Land Institute

3. There is some talk recently about "total energy systems" for housing and new communities. I have no specific information at this moment...

4. While the issue of clusters and neighborhoods is one of some controversy in urban planning today, I think we should plan in terms of neighborhood groupings with limited facilities and an elementary school of about 300 households. In addition there should be larger groupings of 3-5000 households with a wide range of services and a shared high school.

5. household size	bedrooms
1	0
2	1
3-4	2
5	3
6+	4

see Harvard New Community Study

HOUSING: PHYSICAL continued

6. type	F.A.R.	families/acre net	families/neighborhood ^{acre}
Row	.5	16-19	11.5
3 story	1.0	40-45	20
6 story	1.4	65-75	27.5
13 story	1.8	85-95	31

"At a density of about twelve families/acre problems of noise control and privacy develop. About twenty families/acre seems to be newr the point of maximum economy today. The upper ranges above 80 are suitable only for special family types living in central urban locations."

see Kevin Lynch's Site Planning, p. 145 ff.

7. Providence, R.I.	18 persons/acre overall
Manhattan	121
Cumbernauld	8.3
Columbia, Md.	6.75
Harvard New Community	40 persons overall
	83-282/acre in residential areas

see Harvard New Community Study, June 1968

8. "Homogeneous blocks can be separated from other blocks of different price levels if a clearly visible social boundary is available, probably one that need be physically expressed, though it cannot be a wall."

see Gans working paper for Columbia

9. New construction techniques may not significantly lower housing costs because construction costs make up only about half of a unit's rent (53% for single family and 42% for apartments).

see The Kaiser Report

10. Ideally, housing types should be arranged heterogeneously enough so that as a family's space requirements change over time, no change in neighborhood will be required.
Goal of the Columbia workgroup

11. "... demands for more beauty in housing usually favor the aesthetic standards of a single group of well-educated upper-middle class professionals." Gans, J.A.I.P., 1962, p184
(Therefore a wide variety of architectural alternatives is desirable)

HOUSING ECONOMIC

Background and recommendations:

	1966	1966	1969
1. town	taxable property per cap.	property tax rate	tax rate
Boston	\$4050	\$60.90	\$98.0
Quincy	6370	29.90	32.5
Weymouth	7530	25.80	
Hingham	6270	37.40	
Hull	6200	42.70	
Duxbury	9890	22.20	
see ACIR <u>Fiscal Balance</u> Vol II			

2. 1969: Boston land assessed at 35% value; Quincy at 85%

3. Land values:

- a. Squantum lots currently sell for 20-30,000
- b. Weymouthport 2000 unit development, land purchased at \$23,000/acre (will be \$750/unit)
- c. In general, land prices in Boston range from \$.75 to \$1.00/sq. ft. or from \$2000 to 15,000, depending on the lot size

4. Assumptions for sales units: from Harvard New Communities study, 1968

- a. Builder will require 20% return after taxes on his equity
- b. Builder is in the 25% tax bracket
- c. Construction loans are available @ 90% of housing cost and 8% interest
- d. Construction will take between one and two years
- e. Equity equals 10% of the cost of the unit

Same for rental units, plus:

- a. Straight line depreciation is used
- b. Maintenance and operating costs come to 2% of the unit costs
- c. 90% mortgages are available at close to 6½% interest

5. No family should have to pay more than 25% of its income for basic housing expenses.

6. There should be a wide enough range in housing types so that everyone employed in the new community will have the opportunity to live there.

HOUSING: Market study outline

1. FHA housing market analysis of the Boston area, 1966 indicates a market demand from the core area (Boston, Cambridge, Newton and Brookline) as follows:

Annual demand*

Rent level	Apartment size			
under \$115 (+ utilities)	eff.	1	2	3+
	200			
115-135	75	1400		
135-155	25	640	800	
155-175		100	480	175
175-200		25	300	120
200+			160	80

* NOTE: these figures are cumulative and can not be added in columns. They indicate the upper limit of rents.

2. FHA also writes: "On the basis of current construction and land costs and current terms of financing, the minimum gross rents achievable without public benefits or assistance in financing or land acquisition are estimated at \$105 for efficiencies, \$125 for one-bedroom units, \$145 for two-bedroom units, and \$165 for three-bedroom units. The demand at and above these minimum rents will be for 3200 units a year in the next two years." (66-68) Note: this is only for the core area

3. An identical market analysis for housing demand in the Southern Submarket indicates the following:

Annual demand

Rent level	Apartment size			
	eff.	1	2	3+
under \$115	35			
115-135	10	350		
135-155		125	400	
155-175		40	225	80
175-200		15	135	60
200+			65	40

Figures for other submarkets may be obtained from HUD's Analysis of the Boston, Mass. Housing Market, October, 1967

4. Minimal indications of the demand for low income housing:
- Boston Housing Authority's applications for public housing was 4500/year in 1964. (Only 1800 units are available each year)
 - The Mass. State Housing Commission cites a backlog of 2000 for low cost housing in 1968
 - 1960, 21% of Boston's units were substandard (50,000)

5. The ELDERLY submarket:

	# over 65 yrs.	% pop over 65 yrs (1960)
Boston	85,585	12.3%
Quincy	9,921	11.3
Weymouth	3,581	7.4
Hingham	1,381	9.0
Hull	473	6.7

6. The UNRELATED submarket:

Of the 66,000 unrelated individuals over 65 in 1960, 51,000 had incomes under \$3000

7. The LUXURY submarket:

	# income \$15,000+	% pop
Boston	5445	3.3
Quincy	1035	4.5
Weymouth	422	3.6
Hingham	554	14.7
Hull	107	6.2

There has been some further indication from Census and Forbes that the luxury housing market in the core area is beginning to become saturated.

8. Population movements:

	% change 1955-65
Boston	-15.0
Quincy	+ 3.2
Weymouth	+18.0
Hingham	+31.0
Hull	+51.7
Winthrop	+ 9.1

9. Summary of factors affecting housing demand in 1960-1980 (projected)

a. Population: increase 21% (3.4 million persons); be primarily in the suburban rings

b. Households: 23% increase (1 million)
 1. The average household size will decrease
 2. Non-white households will increase nearly 1

c. Income: in constant 1960 dollars, the 1980 med \$11,000 for white households and \$8,000 for nonwh

d. Tenure: owner-occupancy will rise to 62%

e. Supply: there is an anticipated increase of 24 of over one million housing units by 1980
 1. 88% will be standard
 2. New construction, 1970-79, 19,600 units (58
 3. Losses from demolitions, fires, etc.: 7000/
 These will be primarily lower income units

Summary: net additions to housing stock 1970-79 w 12,500 units annually

see: MAPC Housing Metropolitan Boston, Vol. 1, 19

HOUSING: SOCIAL

1! Physical layout should not be depended upon to create social interaction. Suzanne Keller, The Urban Neighborhood. Shared community facilities (schools, laundromats, stores, transportation) are far more useful in stimulating social exchange than are arrangements of housing units in clusters.

2! Shoreline communities will place constraints on the final social mix that ultimately moves to the Islands. Of particular concern must be social conflicts arising from the large % of the Island population which is Black or poor:

	# nonwhite	(blacks)	% pop nonwhite (1960)
Boston	68,493		9.1%
Quincy	175	51	0.2
Weymouth	158	110	0.3
Duxbury	164	156	3.5

	# families under \$3000	% total families (1960)
Boston	27,539	16.6
Quincy	2,158	9.4
Weymouth	780	6.8
Boston SMSA	71,008	(11.0)

see ACIR's Fiscal Balance, Vol 2, Metro Disparities A-31

3! Lots should be subsidized slightly when sold to developers who have agreed to develop coops and condominiums! Several social benefits can result from cooperative developments:

- a! Coops elect their own boards and run their own affairs with democratic control
- b! The development of a cooperative spirit in housing carries over into other aspects of life
- c! Coops develop pride of ownership, leading to stable, attractive communities.
- d! Vandalism, crime, and delinquency have been nonexistent or very low in existing coops.
- e! Coops pioneered in residential integration and point to success in bringing members of all races and religions together as neighbors!

see Building The American City (Douglas Report) pp. 141-142

4! Informal techniques should be used to maximize the possibilities for full racial integration! However, an individual's civil liberties to live where he chooses should in no way be threatened by this policy. Segregation is preferable to enforced quotas. see Gans, working paper for Columbia

Informal techniques should include:

- Selective advertising
- Screening and training of housing salesmen
- Staging of upper income units first

see Grier on Interracial Housing

5. Part of Reston's difficulties seems to have arisen from Simon's overemphasis on aesthetic excellence and on creating a visual sense of community! There was not enough emphasis on a good house at a good price! Gans - people buy the house and space, not the amenities of "community." Because the economic income mix of the Island community will be closer to the working class of Levittown, we must keep Gans's advice in mind!

see The Levittowners

6! Some social heterogeneity is great, but !!!
"Conflict itself is not unhealthy, but irreconcilable conflict is socially destructive, and nothing would be gained by instituting population heterogeneity within political units which cannot deal with the negative consequences of conflict." Gans, J.AIP: 1962, p: 181

HOUSING: GOVERNMENT

1! Widest possible use should be made of all federal housing programs, particularly cooperatives and condominiums. These offer mortgage insurance on long-term loans for financing (co-ops) and to purchase (condominiums). For cost advantages see Douglas Report p! 134 ff!

2! Grants are available to non-profit groups or agencies to demonstrate new or improved means of providing housing for low-income families

3! Mortgage insurance is available to back FHA experimental housing programs, insuring them against loss due to defects in building materials!

4! Special mortgage insurance is available for new projects designed for the elderly or handicapped

5! Public housing can be constructed and maintained privately under the Turnkey I and II programs

Housing Controls

1! Control should be maintained over the entire subdivision process so certain areas can be preserved at lower land cost to developers (therefore producing lower housing cost). Note Columbia's history

2! The Islands should be developed in a series of semi-autonomous communities so that maximum feedback will be possible at each stage of development.

General

1! Assume zoning changes will be no difficulty

2! A Renters Association should be established. A fee of 1% of each unit's rent should be charged to all non public housing units for the Association pool which will go toward continued maintenance of recreational uses on the Islands! Association executives should be elected.

3! The Community Development Corporation will not develop any housing directly, but it may set up subsidiary non-profit corporations to finance lower income housing.

HOUSING: GOVERNMENT

Federal housing programs

Section 202: direct loans for rental housing for elderly and handicapped, now replaced by ...

Section 236: similar to the rent supplement program in that tenants pay 25% of their income toward rent with the Federal government paying the difference; however, the maximum Federal payment on a unit lowers the rent to the level which would be achieved had the project been financed with a one percent mortgage. To be eligible, a family's income must not exceed 135% of the limits for admission to public housing. (Thus the range will be between 4,000 and 6,500 annual income)

Section 203 (b): mortgage insurance for homes, regular program

Section 207: mortgage insurance for rental housing, regular program

Section 213: mortgage insurance for cooperative housing

- a! The top limit for an insured property or project of a coop is \$20 million
- b! The repayment period may extend up to 40 years
- c! Mortgage interest was not to exceed $5\frac{1}{2}$ percent (exclusive of insurance premium charges). With sales-type coops, the interest rate on individual mortgages was $5\frac{3}{4}$ percent. Recent legislation increased both these rates to $6\frac{3}{4}$ until October 1, 1969, at which time the rates are scheduled to drop to 6 percent.
- d! Mortgages may not exceed 97% of replacement value
- e! To be eligible for 213 insurance, the replacement value may not exceed \$9000 for efficiency, \$12,500 for one-bedroom, \$15,000 for twos, \$18,500 for threes, and \$21,000 for four or more rooms.

see Douglas Report, p. 134 ff.

Section 221: mortgage insurance for new or rehab homes and rental housing for displaced families or low and moderate income families (40 year mortgages with no down payments at market interest rates).

Section 231: mortgage insurance for new and rehab rental housing for the elderly and handicapped

Turnkey I: public housing provided by a housing authority's purchase of privately produced construction from a private builder. The parties agree that the sale price shall be the lesser of (1) the price stated in the Letter of Intent from the developer or (2) the sum of (a) the negotiated land price, (b) architectural and engineering fees, and (c) the midpoint between two independent cost estimates based upon the final working drawings and detailed construction specifications.

see The Kaiser Report, p. 76

HOUSING: BASIC ASSUMPTIONS GENERAL

1. # units	income of residents	income 000	rent	density and construction cost ft. ² in \$		
				low	md.	high
1500	low	0-4	60	13.50		15.50
4500	moderate	4-7	90	13.50		15.50
4500	low-mid	7-10	135	13.50		15.50
3000	upper-mid	10-14	190	18.00		22.00
1500	upper	14+	250			30.00

2. Lower class (public housing)

500 high density (120 units/acre) 300 on Long, 200 on Thompson

1000 medium density (50 units/acre) 600 Long, 400 Thompson

No land costs, City will turn over land to BHA

-BHA will contract out clusters to corporations for developer under Turnkey I

-BHA will contract with Island corporations or associations to manage public housing units under Turnkey II

-Development corporations should mix some public housing units with moderate and middle income units through a combined Turnkey I and II development (see Kaiser Report, p. 77)

3. Working class (213 coop and 236 BMIR housing)

1800 high density (120 units/acre) @ \$20/ft.²

1080 on Long, 720 on Thompson

2700 medium density (50/acre) @ \$18/ft.²

1620 on Long, 1080 on Thompson

Land costs @ \$500/unit; 69 acres @ \$25,000/acre

Site development approx. \$1,000/unit

4. Lower-middle class (213 coop, normal financing, 236?)

1800 high density (120 units/acre) @ \$25/ft.²

1080 on Long and 720 on Thompson

2700 medium density (50/acre) @ \$22/ft.²

1620 on Long and 1080 on Thompson

Land @ \$1000/unit; 69 acres @ 50,000/acre

Site development approx. \$1,000/unit

5. Upper-middle class (normal financing, coops)

1600 high density (120/acre) @ \$30/ft.²

1000 on Moon, 300 on Long, 300 on Thompson

1400 low density (30 units/acre) @ \$25/ft.²

1000 on Long and 400 on Thompson

Land @ \$1600/unit; 60 acres @ \$80,000/acre

Site development @ \$1200/unit

6. Upper class (normal financing, coops)

1500 high density (120/acre) @ \$35/sq.ft. All on Moon

Land @ \$2667/unit; 40 acres @ \$100,000/acre

Site development approx. \$1500/unit

7. Totals: 1500 units

Land, 262 acres @ 13,975/acre

(Long 133 acres, Thompson 90 acres, Moon 40 acres)

Site development total: \$15,750,000

Appendix B

Guidelines for Social Indicators

There are several factors that contribute to the usefulness of different indicators and should serve as guidelines in the selection of the best measures for housing needs.

First, an indicator must fluctuate over relatively short periods of time and have a fine enough unit of measurement so that this change will be distinguishable.

Second, it must have a standard or objective means of measurement so that reasonable uniformity in data gathering can be assumed (in general, opinion polls and surveys prove inadequate.)

Third, there should be an equivalent measurement that can be taken at both the local and the national or international level. (While a local indicator may show no change, a relative national change may be evident.)

Fourth, an indicator must be timeless in nature, not bound to a specific program or definition that is subject to unpredictable changes. (The confusions in the redefinitions of U.S. Census categories such as "needing major repairs" and "substandard" or "dwelling unit" and "housing unit" point out this problem.)

Fifth, an indicator should be able to be sufficiently disaggregated so that it can point up subtle differences within a single city or region. (In terms of housing, this is particularly important due to the numerous semi-independent submarkets and highly-segregated residential patterns.)

Sixth, to be really useful, an indicator should be accompanied with a statement concerning its error in measurement.

Appendix C

Housing Quality Indicators

Housing quality is one of the murkiest areas of social scientific analysis. Efforts to evaluate the quality of different social groups' living environment is subject to a cry of relativism that challenges the validity of the entire endeavor.

Housing standards used to be clear-cut in an age when they were restricted to the narrow realm of physical health. England in 1840, for example, established a code for proper housing:

- 1) Continuous supply of pure water
- 2) Drains connecting to sewers
- 3) A W.C. or privy for every two houses
- 4) Regular removal of refuse and clean streets
- 5) Ventilation in all rooms and daylight

Standards and codes have come and gone since then, with increasing efforts to dictate more subjective sets of norms for social and psychological health.

Perhaps the most impressive effort to evaluate housing quality appeared in 1945 when the Committee on the Hygiene of Housing of the American Public Health Association (APHA) perfected "a technique for inspecting and evaluating the health qualities of housing which is simple and objective." The technique is described as "a system of recording and evaluating the results which gives a rating of each area, expressing these health qualities in quantitative terms." This new appraisal method appeared following a long period of pressure from city planners to produce tools to measure housing quality. Even following the detailed evaluations of the Real Property Survey of 1935 and the Census of Housing of 1940, there was an obvious lack of a common measurement technique.

The APHA Appraisal Method filled the void with its "objective"

measure of the "substandardness" of dwelling units. Basically the APHA rating system assigns penalty points for conditions that fail to meet certain standards for adequacy. Each type of deficiency is assigned a maximum number of points in proportion to its seriousness. Finally, all penalty points are added and a rating for each building is determined.

The appraisal method anticipates the dual nature of the 1969 housing goals: there is a Dwelling Survey (decent home) and an Environmental Survey (suitable living environment.) The first offers a maximum penalty score of 600, the second, 350. In addition, each survey anticipates unique regional (climatic) conditions by allowing for a "Floating" maximum. (From a technical point of view this scale has the advantage of clearly stating what characteristics APHA feels are significant. This makes it easier to assess its usefulness once the survey has taken place.)

Criticisms of the APHA approach to housing quality come from sociology and statistics. First, while the Appraisal Method may offer an interesting operational approach to physical housing, it is obviously inadequate in determining what makes a "home" different from a mere "house." By using a scale that is strongly skewed toward physical health and safety, the final score blatantly ignores the social factors that made an area like Boston's West End a viable social community. This argument does not destroy the validity of the APHA scale, it merely limits its application to a description of physical deficiencies.

From a statistical viewpoint, Gerald Hodge has discussed the technical fallacies in APHA's effort to combine measurements made on an ordinal scale (adequate or inadequate) with conclusions that could only be made from an interval scale rating with numerical values.^{16/} An interval scale allows addition of the ratings because the differences between pairs of observations is preserved. The difference of five points must represent the same degree of substandardness throughout the scale. This is impossible to support in measuring housing quality. In addition, subscales are used in which there are large correlations among variables, creating errors in double counting.

Despite these and numerous other deficiencies, the APHA Appraisal Method has been very useful in the past in determining

extreme deficiencies in physical quality. It was developed during a period when demolition was the accepted treatment for slum conditions. Since that time several alternatives to the bulldozer have been pursued, and have provided the need for finer distinctions of substandardness that can incorporate structures as well as streets, blocks and neighborhoods; maintenance; changes in taste; and attitudes of dwelling occupants.

CENSUS

The Census Bureau has been involved in measuring housing quality since it began collecting statistics in the 1940 Census of Housing.

The central concept then was "state of repairs:" whether a dwelling required major repairs or not. "Major" was determined on the basis of whether the deficiency would endanger the soundness of the structure if it remained neglected. The major difficulty with this measurement was that a tent, cellar, or shack could readily be classified as a satisfactory dwelling.

By 1950 the Bureau responded to a decade of criticism by devising the familiar "dilapidated" and "not dilapidated" classifications. The former rating was merited if a dwelling displayed:

- 1) one or more critical defect
- 2) a combination of intermediate defects
- 3) or inadequate original construction

The important goal shifted from the survival of the structure to the safety of the occupants and the adequacy of the shelter as a living environment.

Out of the planning for urban renewal in the early '50's came the cry for another intermediate category of classification that would indicate the "potential" for blight. It took a specially appointed Subcommittee on Housing Adequacy to arrive at the current three-way categories of sound, deteriorating and dilapidated.

Discontent with the structural condition classification system led to a new, informal concept: substandardness. Unofficially adopted by HHFA after 1950, the substandard unit is one that is either "dilapidated" or lacks hot water, flush toilet or a shower for private use. The feeling was that this classification incorporated

criteria of physical quality as well as hazards to health, safety, and welfare (the areas of justification for legislative action in the housing field during the 1950's.)

What can the available Census variables tell us about overall housing quality in an area?

Tenant occupancy (tenure): Although this has correlated quite highly with lower quality housing in the past, there are several reasons for its inappropriateness today:

- 1) Each city and district is unique in its rental and ownership patterns
- 2) The variation is too great between cities
- 3) Home ownership patterns of the pre-1960's are currently being reversed by apartment complexes in cities and suburbs
- 4) Tenure percentages do not vary enough over time

Non-white occupancy: In the past this has been highly correlated with poorer quality housing; however, past trends of housing segregation are beginning to change.

- 1) Correlation varies greatly among cities
- 2) There are not enough changes over time

Age of structure or units built before 1940 or 1950: There is remarkably little correlation between age of buildings and substandardness. Most cities have so little recent construction that old statistics have remained unchanged. The variation among cities is so great that some areas show a positive correlation between age and standard units due to rehabilitation and maintenance practices.

Needing major repairs: This indicator of quality has two fundamental problems. First, it is highly subjective, with standards frequently changing. Second, repairs are usually correlated only with age and often marginally with overall quality of a unit for habitation.

Lacks private bath: This is a good indicator because it is objective, easily obtainable from public sources, and independent of tenure and other factors. Unfortunately it does not correlate very highly with overall quality of the unit.

Gross rent or assessed valuation: These are very good indicators of quality in a large area when no other data is available. They are inadequate when not disaggregated into location, size of unit, number

of rooms, etc. The assessment level is particularly effective as an indicator of the subjective value of a housing unit because it includes the physical structure, the land and the neighborhood.

Overcrowding: Although overcrowding over the 1.0 persons per room standard does have some correlation with substandardness, it is clear that either variable can fluctuate independently. It is frequently noted that a certain degree of overcrowding is considered normal or even desirable by different groups in the population. A look at the 1960 Census of Housing suggests a high correlation between substandardness and low income, but goes on to show how as a family's income rises, crowding decreases only slightly.

HOUSING INDEX

The main problem in developing an objective housing quality scale is how to combine a variety of factors that are correlated with blight and undesirable living conditions. How should each factor be weighted? The problem has been tackled head-on in the Consumer Price Index. All the relevant items comprising a consumer's expenditures are weighed according to their importance at one point in time. These weightings are easily adjusted over time as consumer preferences change.

There have been several local efforts to derive a quality index from available data. One was devised by a group in Baltimore in which recent census data was combined to reach an equivalent of the APHA index.¹⁷ The formula, interesting more for its concept not its content, looks like:

$$S = \frac{k [3 (\% \text{ No. bath}) + (\% \text{ Needing Repair})]}{R \text{ adjusted}}$$

where: S = Index score
k = a constant
R = Rent (reduced by 40% for non-whites)

The scores (S) are then grouped as follows:

<u>Score</u>	<u>Title</u>	<u>Policy</u>
0-14	satisfactory	
15-29	fair	rehab
30-44	poor	rehab
45-69	bad	tear down
70+	very bad	tear down

From the above discussion it is clear that a really valuable index being developed today would have to include three types of variables:

- 1) fixed qualities such as lack of running water
- 2) continuous variables that change over time and can be adjusted independent of physical housing (such as overcrowding)
- 3) an attitudinal study of what aspects of a house are most highly valued to its residents

APPENDIX E

PRELIMINARY HOUSING PROGRAM

BOSTON HARBOR ISLANDS

NEW COMMUNITY MODEL

LAND USE - total acreage is 550¹

residential	270
commerical	40
employment	50
transportation	50
community facility	50
open space	90
	<u>550 total</u>

POPULATION - total population is 42,240 (3.4 people/unit)

Family Income (thousands)	percent of total	persons per family			
		(1-2)	(3-4)	(5-6)	(7+)
0-4	10%	504 (4%)	252 (2%)	252 (2%)	252 (2%)
4-7	30%	1008 (8%)	1638 (13%)	882 (7%)	252 (2%)
7-10	30%	882 (7%)	1890 (15%)	882 (7%)	126 (1%)
10-14	20%	1260 (10%)	882 (7%)	378 (3%)	--
14+	10%	756 (6%)	378 (3%)	126 (1%)	--
totals	100%	4410 (35%)	5040 (40%)	2520 (20%)	630 (5%)

1: Acreage includes Thompsons, Spectacle, Long, 50 acres at Columbia Point and 56 acres of landfill around Thompsons and Spectacle. For the purposes of the initial analysis, Moon is not included, but may be added at a later date.

ACREAGE AND DENSITY BY ISLANDS

	Total Acres	Total Residential Acres	Total Units	High Density		Medium Density		Low Density		3.4/Un Peopl
				Acres	Units	Acres	Units	Acres	Units	
Columbia Point	50	42	1620	0	0	12	720	30	900	5500
Thompsons	157	84	3720	8	960	16	960	60	1800	12650
Spectacle	80	46	2340	8	960	8	480	30	900	7950
Long	213	100	4920	12	1440	28	1680	60	1800	16750
Total	500	272	12600	28	3360	64	3840	180	5400	42240
Moon (if included)	44	28	1320	4	480	4	240	20	600	4480
Landfill	56	--	--	-	--	-	--	-	--	--
TOTAL	600	300	13920	32	3840	68	4080	200	6000	46720

23.5 units/gross acre ÷ 47 units/residential acre = 3.4 AVERAGE PERSONS/UNIT

INCOME DISTRIBUTION AND DENSITY (Number of Units) by Islands

Income (\$ thousands)	COLUMBIA POINT			THOMPSON			SPECTACLE			LONG		
	High	Med.	Low	High	Med.	Low	High	Med.	Low	High	Med.	Low
0-4	0	72	90	96	96	180	96	48	90	144	168	180
4-7	0	216	270	288	288	540	288	144	270	432	504	540
7-10	0	216	270	288	288	540	288	144	270	432	504	540
10-14	0	144	180	192	192	360	192	96	180	288	336	360
14+	0	72	90	96	96	180	96	48	90	144	168	180
	0	720	900	960	960	1800	960	480	900	1440	1680	1800
	1620 Units			3720 Units			2340 Units			4920 Units		

INCOME DISTRIBUTION AND DENSITY

Income (thousands)	Percentage Distrib.	Persons	Units	High 120/acre	Medium 60/acre	Low 30/acre	
0-4	10%	4224	1260	336	384	540	
4-7	30%	12672	3780	1008	1052	1620	
7-10	30%	12672	3780	1008	1052	1620	
10-14	20%	8448	2520	672	768	1080	
14+	10%	4224	1260	336	384	540	
Totals	100%	42,240	12,600	3,360	3,640	5,400	

HOUSING FOR THE BOSTON HARBOR ISLANDS

LOCATIONAL CRITERIA:

High Density (120 units/acre)

1. Need good foundations: build on drumlins until further geological data is available.
2. Proximity to transit and highway (because elderly, upper income, CBD workers, mobile groups)
3. Adjacent to open space or on top of hill for light and to off-set density
4. Noise and height restrictions for airplanes

Medium Density (60 units/acre)

1. Prefer sloping site for multi-level access to buildings (i.e., enter 7 story buildings on the fourth floor
2. Avoid proximity to high density towers
3. Higher rise units will require similar criteria as the high density units above

Lower Density (30 units/acre)

1. Town houses might be constructed on eight to ten acre cul-de-sacs which dead end from the central transportation line
2. Units should be close to the water for amenities and open space
3. Most locations should be isolated or be at dead ends to open spaces
4. Units should be clustered in neighborhoods of approximately 300 for common services and facilities

FOOTNOTES

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4920 Units

COORDINATING FEDERAL PROGRAMS

~~One of the greatest potentials in a new community development is the coordination of the numerous federal programs into a package that will produce the most desirable results.~~ In the field of housing, federal programs must be organized to help subsidize most of the housing for families below the \$7000 annual income level. ~~(Anything above this level we will assume will be built by the private market through regular FHA mortgage insurance.)~~ ~~An example of a unified package that might apply to the Harbor Islands development is outlined on the next page.~~ A brief description follows:

1. 236 rental units (medium and high density) will be available ~~on each Island~~ for eligible families within the \$4000-6000 range. These may include some coop developments.

2. 235 home ownership units (lower density) will be available in the townhouse communities on each Island for approximately the same moderate income groups.

3. Housing for the elderly (mixed densities) will be provided either under the 202 or 231 programs (for moderate incomes) or directly through public housing and the rent supplement program.

4. Public housing (medium and high density) may be constructed directly by the BHA, but strong preference will be given to developers who are able to build under the Turnkey programs and turn the completed projects over to the BHA.

5. Rent supplements will be provided for 20% of all 236 rentals, making the units available to families who would otherwise live in public housing.

6. Rent skewing will be used in some of the units financed through the MHFA, thus bringing the rents to within the moderate income range, and allowing for mobility within the project as incomes rise.

